

REMARKS

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Respectfully submitted,

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By


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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

1 1. (amended) Method for identifying a [transient] momentary acoustic scene, said
2 method including
3 – [the] an extraction, during an extraction phase, of characteristic features from
4 an acoustic signal captured by at least one microphone (2a, 2b), and
5 – [the] an identification, during an identification phase, of the [transient]
6 momentary acoustic scene on the basis of the extracted characteristics,
7 [whereby] wherein at least auditory-based characteristics are identified during the extraction
8 phase.

1 2. (amended) Method as in claim 1, [whereby] wherein, for the identification of the
2 characteristic features during the extraction phase, Auditory Scene Analysis (ASA)
3 techniques are employed.

1 3. (amended) Method as in claim 1 [or 2], [whereby] wherein, during the
2 identification phase, Hidden Markov Model (HMM) techniques are employed for the
3 identification of the [transient] momentary acoustic scene.

1 4. (amended) Method as in [one of the claims 1 to 3] claim 1, [whereby one of
2 several] wherein at least one of the following auditory characteristics are identified during the
3 extraction of said characteristic features: [Volume] loudness, spectral pattern, harmonic
4 structure, common build-up and decay processes, coherent amplitude modulations, coherent
5 frequency modulations, coherent frequency transitions and binaural effects.

1 5. (amended) Method as in [one of the preceding claims] claim 1, [whereby] wherein
2 any other suitable characteristics are identified in addition to the auditory characteristics.

1 6. (amended) Method, as [in one of the preceding claims] claim 1, [whereby, for the
2 purpose of creating auditory objects], wherein the auditory and any other characteristics are
3 grouped along [the principles of the gestalt] Gestalt theory principles.

1 7. (amended) Method as in claim 6, [whereby] wherein the extraction of
2 characteristics and/or the grouping of the characteristics are[/is] performed either in context-
3 free or in context-sensitive fashion [in the sense of human auditory perception], taking into
4 account additional information or hypotheses relative to [the] a signal content and thus
5 providing an adaptation to the [respective] acoustic scene.

1 8. (amended) Method as in [one of the preceding claims] claim 1, [whereby]
2 wherein, during the identification phase, data are accessed which were acquired in an off-line
3 training phase.

1 9. (amended) Method as in [one of the preceding claims] claim 1, [whereby] wherein,
2 the extraction phase and the identification phase take place in continuous fashion or at regular
3 or irregular time intervals.

1 10. (amended) Application of the method per one of the claims 1 to 9 for tuning a
2 hearing device to a [transient] momentary acoustic scene.

1 11. (amended) Application as in claim 10, [whereby] wherein, on the basis of a
2 detected [transient] momentary acoustic scene, a program or a transmission function between
3 at least one microphone (2a, 2b) and a receiver (6) in the hearing device (1) is selected.

1 12. (amended) Application as in claim [9 or] 10, [whereby] wherein any other
2 available function can be triggered in the hearing device (1) on the basis of the identified
3 [transient] momentary acoustic scene.

1 14. (amended) Hearing device (1) with a transmission unit (4) whose input end is
2 connected to at least one microphone (2a, 2b) and whose output end is functionally connected
3 to a receiver (6), characterized in that [the] an input signal of the transmission unit (4) is

4 simultaneously fed to a signal analyzer (7) for [the] an extraction of at least auditory
5 characteristics, that the signal analyzer (7) is functionally connected to a signal identifier unit
6 (8) in which [the] a [transient] momentary acoustic scene is identified, and that the signal
7 identifier unit (8) is functionally connected to the transmission unit (4) for the selection of a
8 program or a transmission function.

1 17. (amended) Hearing device (1) as in claim [15 or] 16, characterized in that the user
2 input unit (11) is functionally connected to the control unit (9).

1 18. (amended) Hearing device (1) as in [one of the claims 14 to 17] claim 14,
2 characterized in that it is provided with suitable means serving to transfer parameters from a
3 training unit (10) to the signal identifier unit (8).